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M A T E R I A L S A F E T Y D A T A S H E E T

SECTION 1. - - - - - CHEMICAL IDENTIFICATION- - - - -

CATALOG #: 450243
NAME: SODIUM ORTHOVANADATE, 99.98%

SECTION 2. - - - - - COMPOSITION/INFORMATION ON INGREDIENTS - - - - -

CAS #: 13721-39-6
MF: NA3O4V
EC NO: 237-287-9

SYNONYMS

SODIUM ORTHOVANADATE * SODIUM TETRAOXOVANADATE(3-) * SODIUM
VANADATE(V) (NA3VO4) (6CI) * SODIUM O-VANADATE * SODIUM VANADIUM
OXIDE (NA3VO4) * TRISODIUM ORTHOVANADATE * TRISODIUM VANADATE *
VANADATE (VO4(3-)), TRISODIUM (T-4)- (9CI) *

SECTION 3. - - - - - HAZARDS IDENTIFICATION - - - - -

LABEL PRECAUTIONARY STATEMENTS

TOXIC (USA)
HARMFUL (EU)
HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.
DO NOT BREATHE DUST.
WEAR SUITABLE PROTECTIVE CLOTHING.

SECTION 4. - - - - - FIRST-AID MEASURES- - - - -

IF SWALLOWED, WASH OUT MOUTH WITH WATER PROVIDED PERSON IS CONSCIOUS.
CALL A PHYSICIAN.
IF INHALED, REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL
RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN.
IN CASE OF CONTACT, IMMEDIATELY WASH SKIN WITH SOAP AND COPIOUS
AMOUNTS OF WATER.
IN CASE OF CONTACT, IMMEDIATELY FLUSH EYES WITH COPIOUS AMOUNTS OF
WATER FOR AT LEAST 15 MINUTES.

SECTION 5. - - - - - FIRE FIGHTING MEASURES - - - - -

EXTINGUISHING MEDIA

WATER SPRAY.
CARBON DIOXIDE, DRY CHEMICAL POWDER OR APPROPRIATE FOAM.

SPECIAL FIREFIGHTING PROCEDURES

WEAR SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING TO
PREVENT CONTACT WITH SKIN AND EYES.

UNUSUAL FIRE AND EXPLOSIONS HAZARDS

EMITS TOXIC FUMES UNDER FIRE CONDITIONS.

SECTION 6. - - - - - ACCIDENTAL RELEASE MEASURES- - - - -

EVACUATE AREA.
WEAR SELF-CONTAINED BREATHING APPARATUS, RUBBER BOOTS AND HEAVY
RUBBER GLOVES.
SWEEP UP, PLACE IN A BAG AND HOLD FOR WASTE DISPOSAL.
AVOID RAISING DUST.
VENTILATE AREA AND WASH SPILL SITE AFTER MATERIAL PICKUP IS COMPLETE.

SECTION 7. - - - - - HANDLING AND STORAGE- - - - -
REFER TO SECTION 8.

SECTION 8. - - - - - EXPOSURE CONTROLS/PERSONAL PROTECTION- - - - -
WEAR APPROPRIATE NIOSH/MSHA-APPROVED RESPIRATOR, CHEMICAL-RESISTANT
GLOVES, SAFETY GOGGLES, OTHER PROTECTIVE CLOTHING.
USE ONLY IN A CHEMICAL FUME HOOD.
SAFETY SHOWER AND EYE BATH.
DO NOT BREATHE DUST.
DO NOT GET IN EYES, ON SKIN, ON CLOTHING.
WASH THOROUGHLY AFTER HANDLING.
WASH CONTAMINATED CLOTHING BEFORE REUSE.
TOXIC.
KEEP TIGHTLY CLOSED.
STORE IN A COOL DRY PLACE.

SECTION 9. - - - - - PHYSICAL AND CHEMICAL PROPERTIES - - - - -
APPEARANCE AND ODOR
OFF-WHITE POWDER W/CHUNKS
PHYSICAL PROPERTIES
MELTING POINT: 850 C

SECTION 10. - - - - - -STABILITY AND REACTIVITY - - - - -
INCOMPATIBILITIES
STRONG OXIDIZING AGENTS
HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS
NATURE OF DECOMPOSITION PRODUCTS NOT KNOWN.

SECTION 11. - - - - - TOXICOLOGICAL INFORMATION - - - - -
ACUTE EFFECTS
MAY CAUSE SKIN IRRITATION.
MAY CAUSE EYE IRRITATION.
MATERIAL MAY BE IRRITATING TO MUCOUS MEMBRANES AND UPPER
RESPIRATORY TRACT.
HARMFUL IF SWALLOWED, INHALED, OR ABSORBED THROUGH SKIN.
TO THE BEST OF OUR KNOWLEDGE, THE CHEMICAL, PHYSICAL, AND
TOXICOLOGICAL PROPERTIES HAVE NOT BEEN THOROUGHLY INVESTIGATED.
RTECS #: YW1120000
VANADIC(II) ACID, TRISODIUM SALT

TOXICITY DATA
ORL-RAT LD50:330 MG/KG SRTCAC
36(1-4),10,1989
IPR-MUS LD50:36300 UG/KG JTEHD6 12,749,1983

TARGET ORGAN DATA
BEHAVIORAL (SOMNOLENCE)
BEHAVIORAL (CONVULSIONS OR EFFECT ON SEIZURE THRESHOLD)
LUNGS, THORAX OR RESPIRATION (DYSPPNAE)
GASTROINTESTINAL (HYPERMOTILITY, DIARRHEA)
BLOOD (HEMORRHAGE)
EFFECTS ON FERTILITY (POST-IMPLANTATION MORTALITY)
SPECIFIC DEVELOPMENTAL ABNORMALITIES (MUSCULOSKELETAL SYSTEM)
ONLY SELECTED REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES
(RTECS) DATA IS PRESENTED HERE. SEE ACTUAL ENTRY IN RTECS FOR
COMPLETE INFORMATION.

SECTION 12. - - - - - ECOLOGICAL INFORMATION - - - - -
DATA NOT YET AVAILABLE.

SECTION 13. - - - - - DISPOSAL CONSIDERATIONS - - - - -
CONTACT A LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE TO DISPOSE OF
THIS MATERIAL.
OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS.

SECTION 14. - - - - - TRANSPORT INFORMATION - - - - -

CONTACT ALDRICH CHEMICAL COMPANY FOR TRANSPORTATION INFORMATION.
SECTION 15. - - - - - REGULATORY INFORMATION - - - - -

EUROPEAN INFORMATION

HARMFUL

R 20/21/22

HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.

S 22

DO NOT BREATHE DUST.

S 36

WEAR SUITABLE PROTECTIVE CLOTHING.

REVIEWS, STANDARDS, AND REGULATIONS

OEL=MAK

OEL-AUSTRALIA: TWA 0.05 MG(V2O5)/M3, JAN1993

OEL-BELGIUM: TWA 0.05 MG(V2O5)/M3, JAN1993

OEL-FINLAND: TWA 0.5 MG(V2O5)/M3, JAN1999

OEL-FRANCE: VME 0.05 MG(V2O5)/M3, JAN1993

OEL-GERMANY: MAK 0.05 MG(V2O5)/M3, JAN1999

OEL-HUNGARY: TWA 0.05 MG(V2O5)/M3, STEL 0.1 MG(V2O5)/M3, JAN1993

OEL-JAPAN: OEL 0.5 MG(V2O5)/M3, JAN1993

OEL-THE NETHERLANDS: MAC-TGG 0.01 MG(V)/M3, MAC-K 0.03 MG(V)/M3,
JAN1999

OEL-THE PHILIPPINES: TWA 0.25 MG(V2O5)/M3, JAN1993

OEL-POLAND: MAC(TWA) 0.5 MG(V2O5)/M3, JAN1993

OEL-SWITZERLAND: MAK-W 50 PPM (175 MG/M3), JAN1999

OEL-TURKEY: TWA 0.5 MG(V2O5)/M3, JAN1993

OEL-UNITED KINGDOM: LTEL 0.05 MG(V2O5)/M3 (DUST), JAN1993

OEL-UNITED KINGDOM: LTEL 0.5 MG(V2O5)/M3, JAN1993

NIOSH REL TO VANADIUM (AS V2O5), RESP DUST/FUME-AIR:CL 0.05 MG/M3/15M
NIOSH* DHHS #92-100,1992

EPA TSCA SECTION 8(B) CHEMICAL INVENTORY

SECTION 16. - - - - - OTHER INFORMATION- - - - -

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